

# MARINE CORPS AIR STATION YUMA

# **PROJECT OVERVIEW**

The Department of the Navy (DON) and Arizona Public Service (APS) are working together to develop a microgrid on Marine Corps Air Station (MCAS) Yuma.

During normal operating conditions, APS will use the generators of the microgrid to provide grid stabilization and peak power generation capability for the utility grid. In the event of a system-wide grid outage, the 25 megawatt on-base microgrid will provide power to the installation within 30 seconds, eliminating any impact to the base mission. This power will provide enough backup power to cover 100 percent of current and projected base energy requirements, which far exceeds and may replace current back up capabilities.



# **PROJECT HIGHLIGHTS**

- The project will take up roughly one acre of land on MCAS Yuma.
- The project will provide enough backup power to cover 100 percent of current and projected base energy requirements.
- Classified as a REPO Model 2, this project will generate energy on site at MCAS Yuma that will flow to the external grid for community consumption.





**EXTERNAL GRID** 

MODEL 2

# ABOUT THE NAVY'S ONE GW INITIATIVE

The Secretary of the Navy established the Renewable Energy Program Office (REPO) in May 2014 to help the DON bring one gigawatt (GW) of renewable energy into procurement by the end of 2015. Renewable energy generation will improve the DON's energy security, operational capability, strategic flexibility and resource availability.

#### Projects aim to:

- 1. Be cost-effective, mission-compatible and leverage third-party financing.
- 2. Stabilize long-term operational costs.
- Be complemented by smart microgrid technology and utility infrastructure upgrades.











# MARINE CORPS AIR STATION YUMA

# ABOUT MARINE CORPS AIR STATION YUMA

MCAS Yuma's mission is to provide aviation ranges, support facilities and services that enable its tenants, other Marine Corps commands, visiting military and interagency forces to enhance their mission capability and combat readiness.

MCAS Yuma is the Marine Corps' premier aviation training base. With access to more than one million acres of bombing and aviation-training ranges and superb flying weather, MCAS Yuma supports 80 percent of the Corps' air-to-ground aviation training. The air station hosts approximately 70 aviation units, bringing an average of 600 aircraft and 14,000 personnel for ongoing training that takes place throughout the year.

# ABOUT ARIZONA PUBLIC SERVICE

APS serves about 2.7 million people in 11 of Arizona's 15 counties, and is the Southwest's foremost producer of clean, safe and reliable electricity. Using a balanced energy mix that is nearly 50 percent carbon-free, APS has one of the country's most substantial renewable energy portfolios, and owns and operates the Palo Verde Nuclear Generating Station, the country's top power producer and largest producer of carbon-free energy. The company is also a proven leader in introducing technology and services that offer customers choice and control over their energy consumption. With headquarters in Phoenix, APS is the principal subsidiary of Pinnacle West Capital Corp. (NYSE: PNW).

# PROJECT SITE MAP



The Department of the Navy does not endorse any non-Federal entity, its products, or its services. The appearance of an entity's logo on this document does not suggest endorsement, sponsorship, contractual relationship or preferential treatment of any kind by the Department with that non-Federal entity.